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PHOTOGRAPHIC
INTERPRETATION
REPORT

NATIONAL PHOTOGRAPHIC
INTERPRETATION CENTER

KHABAROVSK RADIO COMMUNICATIONS RECEIVER AND TRANSMITTER STATIONS NEKRASOVKA, USSR

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ABSTRACT

1. This report describes two adjacent, separately secured radio communications stations near Khabarovsk/Nekrasovka Airfield . Khabarovsk Radio Communications Receiver Station Nekrasovka contains eight fishbone antennas, eight horizontal dipole antennas, and 13 quadrant antennas. Khabarovsk Radio Communications Transmitter Station Nekrasovka contains nine fishbone antennas and 24 phased dipole antennas. This report contains a basic description of each facility, plus two annotated photographs and mensuration data.

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INTRODUCTION

2. Khabarovsk Radio Communications Receiver Station Nekrasovka and Khabarovsk Radio Communications Transmitter Station Nekrasovka are approximately 3.6 nautical miles (nm) east of the city of Khabarovsk and 2 nm north of the center of the runway at Khabarovsk/ Nekrasovka Airfield

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3. The two facilities were first reported in March 1968 as a single installation. However, each station is separately fenced and has no direct access to the other. There is no evidence that they are cable connected with each other or with any other facility.

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BASIC DESCRIPTION

Khabarovsk Radio Communications Receiver Station Nekrasovka

5. Khabarovsk Radio Communications Receiver Station Nekrasovka is at 48-25-45N 135-13-20E. It contains four 5-3-3-5 fishbone antennas, four 3-2-2-3 fishbone antennas, eight horizontal dipole antennas, and 13 quadrant antennas (Table 1 and Figure 1). These antennas surround the support area, although the antenna field lies primarily to the west.

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6. The support area contains a two-story support building, a small steamplant, a large single-story support building, two probable barracks, three probable housing units, and five small support buildings (Table 2). A mast-mounted probable R400 microwave antenna (azimuth undetermined) is next to the control building. The entire antenna field and the support area are secured by a single fence. The service road at the south end of the installation leads to the support area at Khabarovsk/Nekrasovka Airfield.

Khabarovsk Radio Communications Transmitter Station Nekrasovka

7. Khabarovsk Radio Communications Transmitter Station Nekrasovka is at 48-25-35N 135-14-22E. It contains eight 2-2-2-2-2 fishbone antennas, one 2-2-2 fishbone antenna, and 24 horizontal phased dipole antennas (Table 3 and Figure 2). The eight large fishbone antennas are in space diversity pairs, as follows:

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Antennas
1 and 5
2 and 6
3 and 7
4 and 8

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Table 1. Antennas at Khabarovsk Radio Communications Receiver Station Nekrasovka (Keyed to Figure 1)

Item	Antenna Type	Soviet Designator	Estimated Frequency Range (MHz)	Azimuth (degrees)
1	Fishbone	BS-2	--	
2	Fishbone	BS	--	
3	Fishbone	BS	--	
4	Fishbone	BS	--	
5	Fishbone	BS-2	--	
6	Fishbone	BS-2	--	
7	Fishbone	BS-2	--	040
8	Fishbone	BS	--	065
9	Horizontal dipole	VGD$\frac{30}{35}$d	2.50 - 6.25	065
10	Horizontal dipole	VGD$\frac{30}{24}$d	2.50 - 6.25	105
11	Horizontal dipole	VGD$\frac{30}{24}$d	2.50 - 6.25	105
12	Horizontal dipole	VGD$\frac{15}{12.5}$d	5.00 - 12.50	105
13	Horizontal dipole	VGD$\frac{15}{12.5}$d	5.00 - 12.50	205
14	Horizontal dipole	VGD$\frac{30}{24}$d	2.50 - 6.25	205
15	Horizontal dipole	VGD$\frac{30}{24}$d	2.50 - 6.25	205
16	Horizontal dipole	VGD$\frac{30}{35}$d	2.50 - 6.25	293
17	Quadrant	UGD$\frac{12}{12}$d	9.35 - 15.90	Omnidirectional
18	Quadrant	UGD$\frac{32}{24.5}$d	3.51 - 5.97	Omnidirectional
19	Quadrant	UGD$\frac{12}{12}$d	9.35 - 15.90	Omnidirectional
20	Quadrant	UGD$\frac{12}{12}$d	9.35 - 15.90	Omnidirectional
21	Quadrant	UGD$\frac{32}{24.5}$d	3.51 - 5.97	Omnidirectional
22	Quadrant	UGD$\frac{32}{24.5}$d	3.51 - 5.97	Omnidirectional
23	Quadrant	UGD$\frac{12}{12}$d	9.35 - 15.90	Omnidirectional
24	Quadrant	UGD$\frac{32}{24.5}$d	3.51 - 5.97	Omnidirectional
25	Quadrant	UGD$\frac{12}{12}$d	9.35 - 15.90	Omnidirectional
26	Quadrant	UGD$\frac{32}{24.5}$d	3.51 - 5.97	Omnidirectional
27	Quadrant	UGD$\frac{12}{12}$d	9.35 - 15.90	Omnidirectional
28	Quadrant	UGD$\frac{32}{24.5}$d	3.51 - 5.97	Omnidirectional
29	Quadrant	UGD$\frac{32}{24.5}$d	3.51 - 5.97	Omnidirectional

Table 2. Buildings at Khabarovsk Radio Communications Receiver Station Nekrasovka (Keyed to Figure 1)

Item	Building	Stories
A	Control	2
B	Probable barracks	1
C	Probable barracks	1
D	Steamplant	1
E	Probable housing	1
F	Probable housing	1
G	Probable housing	1
H*	Support	1

Table 3. Antennas at Khabarovsk Radio Communications Transmitter Station Nekrasovka (Keyed to Figure 2)

Item	Antenna Type	Soviet Designator	Estimated Frequency Range (MHz)	Azimuth (degrees)
1	Fishbone	2BS-2	--	
2	Fishbone	2BS-2	--	
3	Fishbone	2BS-2	--	
4	Fishbone	2BS-2	--	
5	Fishbone	2BS-2	--	
6	Fishbone	2BS-2	--	
7	Fishbone	2BS-2	--	
8	Fishbone	2BS-2	--	
9	Fishbone	BS-2	--	065
10	Phased dipole pair	SGD$\frac{B}{2}$RA	3.75 - 9.38 9.19 - 18.00	015/195
11	Phased dipole pair	SGD$\frac{B}{2}$RA	9.19 - 18.00 3.75 - 9.38	165/345
12	Phased dipole pair	SGD$\frac{B}{2}$RA	9.19 - 18.00 3.75 - 9.38	045/225
13	Phased dipole pair	SGD$\frac{B}{2}$RA	3.75 - 9.38 9.19 - 18.00	135/315
14	Phased dipole pair	SGD$\frac{B}{2}$RA	9.19 - 18.00 3.75 - 9.38	105/285
15	Phased dipole pair	SGD$\frac{B}{2}$RA	3.75 - 9.38 9.19 - 18.00	075/255
16	Phased dipole pair	SGD$\frac{B}{2}$RA	9.19 - 18.00 3.75 - 9.38	045/225
17	Phased dipole pair	SGD$\frac{B}{2}$RA	3.75 - 9.38 9.19 - 18.00	075/255
18	Phased dipole pair	SGD$\frac{B}{2}$RA	9.19 - 18.00 3.75 - 9.38	105/285
19	Phased dipole pair	SGD$\frac{B}{2}$RA	3.75 - 9.38 9.19 - 18.00	135/315
20	Phased dipole pair	SGD$\frac{B}{2}$RA	9.19 - 18.00 3.75 - 9.38	165/345
21	Phased dipole pair	SGD$\frac{B}{2}$RA	3.75 - 9.38 9.19 - 18.00	015/195

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Table 4. Buildings at Khabarovsk Radio Communications Transmitter Station Nekrasovka (Keyed to Figure 2)

Item	Building	Stories
A	Control	1
B	Probable administration	1
C	Probable barracks	2
D	Steamplant	1
E	Support	1
F	Support	1
G	Support	1

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The 24 phased dipole arrays are also paired. They have the following azimuths.

Arrays	Azimuths (degrees)
10 and 21	15/195
11 and 20	165/345
12 and 16	45/225
13 and 19	135/315
14 and 18	105/285
15 and 17	75/255

8. The support area lies on the east edge of the antenna field. It consists of a single-story control building, a probable administration building, a two-story probable barracks, a steam-plant, three small support buildings, and approximately 12 smaller structures (Table 4). A mast-mounted probable R400 antenna (azimuth undetermined) is next to the control building. The entire antenna field and the support area are secured by a single fence. The service road to Khabarovsk and the village of Garovka enters from the north.

9. Although this facility is designated as a transmitting station, the presence of fishbone antennas indicates that its primary function is receiving.

REFERENCES

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MAPS OR CHARTS

ACIC Chart, Series 200, Sheet 0204-22, Scale 1:200,000

DOCUMENTS

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REQUIREMENT

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NPIC/IEG/WGD/SSB Project 251584

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